Population Health in Canada: A Brief Critique

An internationally influential model of population health was developed in Canada in the 1990s, shifting the research agenda beyond health care to the social and economic determinants of health. While agreeing that health has important social determinants, the authors believe that this model has serious shortcomings; they critique the model by focusing on its hidden assumptions.

Assumptions about how knowledge is produced and an implicit interest group perspective exclude the sociopolitical and class contexts that shape interest group power and citizen health. Overly rationalist assumptions about change understate the role of agency.

The authors review the policy and practice implications of the Canadian population health model and point to alternative ways of viewing the determinants of health. (*Am J Public Health.* 2003;93:392–396)

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IN 1991, CANADIAN HEALTH economists Robert Evans and Greg Stoddart, of the Canadian Institute for Advanced Research (CIAR), published a highly influential article[1] in which they developed a model for analyzing the determinants of the health of populations. In a nutshell, their model (outlined in collaboration with other members of CIAR, a think tank funded from corporate and public sources) reflected the conviction that it is the social environment, of which health care systems are a relatively small part, that determines health. Evans and Stoddart's framework provided a template, they suggested, that could incorporate evidence regarding the health effects of the social environment. Further publications, products of CIAR's Population Health Program, quickly followed[2,3] as the emerging field of population health took shape. Similar reports were published in other countries[4] as the population health perspective gained momentum.

Members of the Population Health Program became key contributors to federal and provincial government studies of health and health care in Canada, and they are now powerful players in new institutions, such as the Canadian Institutes for Health Research, that fund research on the determinants of health. The CIAR model became internationally influential partly because of Canada's prominent role in the health promotion movement.

The CIAR model of population health has helped to expand the health research agenda beyond health care as the producer of health. In that respect, it revives a public health policy tradition reaching back at least to the 19th century. It has highlighted the relationship between economies, societies, and health, and it has led to a focus on the health of children. In what follows, however, we provide a critical reading of the population health model emanating from CIAR. Our argument is that the framework, as described in various publications,[1-3] is flawed because of assumptions in its perspective that limit analyses of the determinants of health at the macrolevel; because it excludes, at the microlevel, the local contexts in which the health of real people is shaped; and because it fails to adequately conceptualize possibilities for change. We conclude with suggestions for responding to these difficulties.

POPULATION HEALTH: A CRITIQUE

Population health has been the subject of much critical attention in Canada.[5–8] Poland et al. published a detailed critique of Evans and Stoddart's model elsewhere.[9] We do not propose to repeat that critique here. The point we want to emphasize is that while models can be useful heuristic devices, there are risks involved in assuming that they provide a transparent means through which reality can be readily apprehended. In particular, many population health analysts seem to believe they are producing a neutral and universally acceptable research and policy paradigm, whereas they are actually bringing forward a specific, narrow, and, we would argue, asocial combination of epidemiology and economics.

Population health research is certainly identifying regularities in the relation between the social environment and health that are analytically valuable, such as the links between socioeconomic status (SES) and health. On the other hand, the limitations in the outlook that informs the research lead to both significant silences and a lack of analysis of the context of determinants of health ("context stripping," in Raphael and Bryant's[6] terms). In what follows, we want to highlight 3 related and problematic assumptions that underpin currently dominant population health models.

First, dominant models of population health such as that of Evans and Stoddart consist of a specific disciplinary combination of epidemiology and economics. These models share a common perspective on the nature of knowledge production with regard to health as a social phenomenon. This perspective, borrowed from the natural sciences, assumes that the world and social phenomena can be divided up into variables and that these variables can then be correlated with one another to produce a picture that is a reliable proxy for reality.[10] Reality, however, is much more layered and textured than this perspective suggests.[11–13]

What is missing in the variable view is any attempt to accommodate within its models the broader structures and circumstances that produce particular relationships between factors. The variable perspective claims to produce knowledge that is both neutral (the data speak for themselves) and universal (if the research is done properly, the data tell the truth). However, knowledge is always specific to the perspective that produces it, and it is consequently always partial. The assumptions inherent in any orientation to research, not all of which are readily apparent in the models that have been offered, determine what types of events are viewed as data, which data are considered worthy of collection, and how data are incorporated into explanatory frameworks.

Second, although there is an emphasis on socioeconomic conditions as a determinant of health status in the Evans and Stoddart population health model, there is little interest in what surely should be a vital question: what are the causes of differences in SES? The CIAR model involves a clear if sometimes only implicit view of Canadian social structure. Society is viewed as a collection of interest groups in which some are more powerful than others but in which the state, informed by science, adjudicates among its own interests and those of the interests that make up society. Consequently, appeals for change are addressed almost entirely to policymakers. There is a heavy reliance on knowledge as a persuasive factor, but the complexities of what has been called "speaking truth to power"[14] (i.e., the relationships between knowledge and power structures) are not addressed.

According to the CIAR model, change is brought about by social scientists and the governments they inform rather than by classes, social movements, or communities. At the level of description, this picture is not inaccurate. However, the power of some groups is "built into" the way social systems operate and hence is largely invisible. Moreover, the power of interest groups is dependent on broader "rules of the game" that determine the context within which change takes place. Yet, the structures of such rules and how and why they change are missing from the population health research agenda. While expressing an interest in social structural influences on health, the population health model under discussion here lacks concepts of social structure adequate for analyzing current situations, how these situations came about, and what might be done about them. Interest group models in general have difficulty explaining change other than in terms of tautological descriptions of how (rather than why) the power of certain interest groups has increased and that of others has lessened.

Third, to follow from the preceding point, population health models such as that proposed by Evans and Stoddart lack a vision of agency and action at the meso- and microlevels. Population health characterizations of the determinants of health are derived from abstract statistical models that often contain an "individualist bias": hence the label *population health.* These characterizations devote little time to consideration of how such models can be connected to real people and groups in actual social contexts.

In other words, while population health research contributes to our understanding of the ways in which aspects of the social environment determine the health of populations, its models are unable to address the ways in which people, both individually and collectively, act to improve their health. It emphasizes such structures as socioeconomic stratification, but its models leave no room for agency (i.e., how situations can change). Population health analysts tend to avoid discussion of those social and political struggles that help to bring about improved living conditions and better health care.[15–17] Population strategies for change thus tend toward overly rationalist models in which greater knowledge is simply assumed to produce policies oriented to the enactment of this knowledge (although CIAR participants do argue that health policies are somewhat distorted by interest groups, particularly the medical profession).

IMPLICATIONS FOR POLICY AND PRACTICE

Two major implications for policy and practice arise from the critique outlined in the previous section. First, because at the macrolevel population health models have neglected the broader socioeconomic context, they lead to a political dead end.

All mainstream political actors insist that their programs will ultimately solve social problems such as poverty or inequality. How can we assess these competing claims if we do not have available an analysis of the causes of such social problems? Second, the field of population health has successfully marginalized an earlier approach to the determinants of health—the new public health (or the "new health promotion")—that placed greater emphasis on the active roles of individuals and communities.

One of the missing terms in currently popular population health models such as that of Evans and Stoddart is *capitalism*. Capitalist societies share particular foundational characteristics—free markets, private property, and contract law, for example—that have important implications for how human well-being might be realized in such societies. There are varieties of capitalism, however; capitalist nations differ in their sociopolitical arrangements, the degree of health inequality they display, and the average level of health of their citizens. We need research that will help us understand why some capitalist countries with strong social democratic political parties and resilient welfare states, such as Sweden and Norway, have much lower health inequalities and better average population health than Canada or the United States.[18,19] That the United States, one of the world's richest and most powerful countries, cannot provide access to health care for all of its citizens, and that it has one of the poorest health records of any of the 15 to 20 most developed nations, must be a cause of concern and the object of analysis.[19,20] The nature of American (and Canadian) capitalism surely should be one focus of such an analysis.

Rather than explorations of such phenomena, however, what emerges from population health models verges on trickle-down theories of economic prosperity. Trickle-down theories assume that all we have to worry about is economic growth, and human health and well-being will automatically follow. Hence, the early suggestions of CIAR were that we should devote more resources to the "productive sectors of society" (i.e., the economy) and fewer resources to health care, because the economy is the "engine" that provides "benefits."[2,3] Yet today, as even the World Bank and the International Monetary Fund are beginning to acknowledge (particularly with their emphasis on social capital), there is a much more nuanced picture of economy–state–society interactions in which social conditions are viewed as underlying or supporting—rather than simply being the result of—a prosperous economy.[21] There is also increasing awareness that national or regional wealth or economic growth cannot be equated with improved health or well-being; the health situations in some poor nations or regions are better than those in other nations or regions with greater per capita gross national products.

Another example of the inability of dominant population health models to produce relevant and effective policies is found in research on child development as a determinant of later well-being and health. On the one hand, this is clearly important research. On the other hand, in a province such as Ontario—whose present government is ideologically committed to free-market solutions to social problems—this focus on childhood highlights the growing gap between what we are learning about the determinants of health and actual policy trends and implementation. One product of Ontario's program, for example, is public advertisements featuring children emerging from eggs and asking readers to help nurture children to become "eagles." At the same time, street beggars and homeless families are major issues in the province, government cutbacks have made life more difficult for families receiving welfare, and programs helping children with various kinds of disabilities have been the victims of state downsizing.

Many of the central tenets of population health were established long before the term itself came into recognition. It has long been known, for example, that the wealthy live longer, healthier lives than do the poor. More recently, *A New Perspective on the Health of Canadians*[22] argued that access to health care was not the only determinant of health; lifestyle, biology, and the environment were said to be at least as important. Indeed, a "lifestyle focus" dominated health discourse in the 1970s and early 1980s in the form of health promotion.[23] However, beginning in the mid-1980s, critiques of the lifestyle approach led to an appreciation of the structural determinants of health in health promotion.[24–26] This "new public health" (or "new health promotion"), which became prominent in Canadian health policy, employed concepts such as community development and empowerment, along with intersectoral collaboration, as key public health strategies for improving health.[26–28] The new health promotion in Canada emphasized research at the individual and community levels, focusing on questions of collective action and issues of social justice.

Population health has succeeded in undermining and to some extent replacing health promotion, which advocates of population health have characterized as lacking rigor and being too "political," as the dominant discourse in Canadian health policy.[6,7] The new health promotion has been subjected to a number of critiques, and it is not our intention to advocate for it uncritically. However, since the early 1990s, the population health movement has replaced the new health promotion's bottom-up, action-oriented focus on a community's control over its environments and on health advocacy with a top-down, professionally focused, researcher-driven approach. Yet, neither of these approaches by themselves is entirely adequate. Moreover, by focusing on statistical aggregates rather than people with real connections with one another, population health researchers have excised the notions of agency and local action from their models. Consequently, they do not learn how individuals and groups view their own world and their real social relationships, what they identify as problematic, and how they might be helped to create their own healthy communities and environments.

ALTERNATIVE PERSPECTIVES

How might we expand on, or reframe, currently dominant versions of population health? How might we push beyond the conceptual and methodological limits of population health models? We need to develop analyses that not only demonstrate the re-

lationships between variables but tackle the social processes that produce them. That is, we must incorporate the broader context of politics and economics into our analytical models. We also need to commit to research that involves real people and groups in such areas as policy, implementation, and action.

An example of the restrictive perspective of the CIAR version of population health concerns a topic of central concern: SES. Population health researchers have simply assumed that SES, rather than class, is the significant structural factor in determining the health of populations. Accordingly, they have proceeded to examine the health consequences of SES inequalities. While SES is simply a ranking of individuals in regard to income, education, or status, class represents structural characteristics of society.[15,29,30] According to the structural class perspective, recently and rapidly increasing social inequalities (in income, for example) are, at least in part, a consequence of structural changes in class power. With the rise of business power and the decline of labor and citizenship power in an era of economic (neo-liberal) globalization—and, in many nations, "new right" attacks on the welfare state[17,20]—there has been a rapid and startling rise in social, income, and health inequalities.[17,19,20,31–34]

With economic globalization, dominant business classes no longer need to accommodate to citizen pressures within national boundaries. As a result of international competition, states themselves are more pliable to business pressures than they were when corporations were more nationally bound. Market-oriented politics and policies and state deregulation create SES-related inequalities at the same time that they erode the social assets and population capacities that might have buffered the health effects of these inequalities. Healthy social environments are undermined at the very time that the resources that might have helped people cope with adverse consequences are "restructured." The issue here is that the SES approach tends to ignore the structural determinants of the very inequalities that SES so accurately describes.

The class approach can also be exemplified in application to a population health–related approach regarding the health consequences of income inequality sometimes referred to as the "Wilkinson hypothesis," after its originator, Richard Wilkinson.[35,36] According to this hypothesis, differences in average health status among the developed nations of the world are due to the distribution of income *within* nations rather than the average levels of per capita gross national product *between* nations. Income inequalities are associated with social fragmentation, which leads to higher levels of illness in countries (or states in the United States) with more income inequality than in those with less such inequality.

There is, however, an alternative explanation that focuses on the determinants of income inequality rather than inequality per se. This explanation postulates that changes in class power in the final quarter of the 20th century led to a decline in welfare states and brought about higher levels of social inequality in general (including but not restricted to income) as well as lower levels of social cohesion.[37] The key issue, then, is market-dominated policies (neoliberalism) rather than simply the mechanisms through which income inequalities are related to health.[33] The use of different concepts thus produces a different emphasis and an alternative form of knowledge regarding the determinants of the health of populations. This knowledge takes account of currently dominant political and economic trends that have seen an increased advocacy for and reliance on free markets in human affairs. In other words, it brings into the field of inquiry the social processes that underlie the more obvious empirical measures of social inequality and health.

Another approach to the determinants of health might complement a focus on class as an underlying structural force with a focus on questions of agency and action at the individual and community levels. Various alternative methods to those commonly used in population health research (e.g., qualitative research and historical and case studies) are suggested by this approach. Such a perspective also raises the following pertinent question: How is research on the social determinants of health produced, and for whom? There are, for example, new forms of research that are linked to action and participation from the outset. What these forms of research share is a way of proceeding in which knowledge production begins with the actual experiences and concerns of people and communities and there is an attempt to understand the various social and economic political forces that produce, shape, and limit those experiences with a view to changing them.[38–40] Such research begins with where people are; it is grounded in the concrete experiences of everyday life, and it can mobilize citizens themselves to do something about the problems they face in their everyday lives.

An alternative research and action agenda would not avoid discussion of the political struggles that are involved in health work and in improving the social conditions that determine health. It would also include as part of its policy and research constituency the groups that population health is intended to help the most: the subjects of economic, social, political, class, racial, and sex inequalities and oppression. Research and action would not simply consist of people viewed as bundles of variables or as the objects of research but also as citizens with the capacities to alter their social and health destinies.

CONCLUSIONS

CIAR population health advocates in Canada have done much. They have reemphasized the role of the social determinants of health and the relationships between economies, societies, and health. They have focused attention on the effects of SES and on the importance of ameliorating the conditions of less privileged children.

Yet, the specific orientations of epidemiologists, economists, and planners regarding methods and their weak conceptions of social phenomena have truncated and narrowed research and resulted in a lack of consideration of a broader spectrum of methodologies and points of view. Population health analysts have unwittingly put forward a false consensus of scientific neutrality in an area that is actually highly fragmented. The field of popula-

tion health did not emerge in a vacuum but partially displaced an existing research and action agenda in Canada that had, to some extent, recognized and confronted issues of power and politics.

Despite being avowedly multidisciplinary, CIAR population health advocates have produced limited and flawed characterizations of the determinants of illness, health, and well-being and the possibilities for implementation of alternative policies. One aspect of the CIAR model that appeals to those currently powerful in Canada is that it can be used in ways that accommodate, rather than challenge, current ways of doing things, for example, cutting funds for national health insurance but doing nothing about the broader "social determinants" of health. Canadians—and Americans—would be better served by a more open and variegated examination of the determinants of health, one that acknowledges current political and economic trends yet also links up with resistance to the inequalities and inequities created by them. ■

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All of the authors contributed to the ideas underlying the article and its structure. Some wrote specific paragraphs or short sections; all reviewed and commented on the final version. D. Coburn suggested the article and wrote a first draft. K. Denny rewrote and restructured the article in response to editorial comments.

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